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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TRAN, HAI V	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/468,173	GORDON ET AL.	
	Examiner	Art Unit	
	Hai Tran	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *15 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-17* is/are rejected.

7)☒ Claim(s) *9 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 06/15/2004 have been fully considered but they are not persuasive.

Applicant argues, "the combination of Coleman and Obikane fails to teach or suggest the applicants' invention as a whole."

In response, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

In this case, Coleman discloses an apparatus for forming a multiplexed transport stream to deliver an interactive program guide (Fig. 1). Coleman further shows a block diagram of an encoder apparatus (Fig. 1) for assembling and transmitting IPG elementary packets stream in a multiplex with various services encoded in packet elementary streams according to MPEG-2 (i.e., service 1 PKTS of Fig. 1 comprises packets of video elementary stream, audio elementary stream and ancillary elementary stream). Coleman further shows a multiplexer and assigner (Fig. 1, el. 14) adapted to receive Service 1..N PKTS (i.e., service 1 PKTS of Fig. 1 comprises packets of video elementary stream, audio elementary stream and ancillary elementary stream) and IPG packets wherein the multiplexer and assigner (Fig. 1, el. 14) assign PIDs (Fig. 4 and 5

with assigned PID) to the packets stream (Service 1..N PKTS and IPG packets) and to multiplex the packets streams to form the transport stream (note TS arrow toward Transmitter 22). Coleman further discloses a PMT for storing PID assignment of video and audio programming associated with a predetermined time period and PID assignment of data PIDs associated with the video and audio programming associated with the predetermined time period (Col. 7, lines 35-58 and Col. 13, lines 25-37).

Coleman does not clearly discloses encoder and packetizer adapted to receive a plurality of video inputs, an audio input, and a plurality of data inputs, and to encode and to packetize in order to generate the inputs Service 1..N PKTS of Fig. 1 (Notes each service # PKTS of Fig. 1 comprises packets of video elementary stream, audio elementary stream and ancillary elementary stream).

Obikane discloses encoder and packetizer (Fig. 12) to encode and packetize the plurality inputs (video, audio) into a plurality corresponding packet streams and generate a TS or S41 of one video/audio program (Col. 8, lines 5-Col. 10, lines 57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Coleman with Obikane so a plurality of associated video/audio data of each service is encoded respectively and then, different packet identification information is added to each coded video/audio data to packetize the coded video data as one program (Col. 7, lines 62-65+).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 recites the limitation "said prime time viewing" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

Claims 9 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al. (US 5844620) in view of Obikane (US 6404818), and further in view of Lawler (US 5758259).

   Regarding claim 1, Coleman discloses an apparatus for forming a multiplexed transport stream to deliver an interactive program guide (Fig. 1).

Coleman further shows a block diagram of an encoder apparatus (Fig. 1) for assembling and transmitting IPG elementary packets stream in a multiplex with various encoded services in packet elementary streams according to MPEG-2 encoder/packetizer (i.e., service 1 PKTS of Fig. 1 comprises video elementary stream, audio elementary stream and ancillary elementary stream).

Coleman further shows a multiplexer and assigner (Fig. 1, el. 14) adapted to receive Service 1..N PKTS (i.e., service 1 PKTS of Fig. 1 comprises packets of video elementary stream, audio elementary stream and ancillary elementary stream).

Coleman further shows a multiplexer and assigner (Fig. 1, el. 14) adapted to receive Service 1..N PKTS (i.e., service 1 PKTS of Fig. 1 comprises packets of video elementary stream, audio elementary stream and ancillary elementary stream) and IPG packets wherein the multiplexer and assigner (Fig. 1, el. 14) assign PIDs (Fig. 4 and 5 with assigned PID) to the packets stream (Service 1..N PKTS and IPG packets) and to multiplex the packets streams to form the transport stream (note TS arrow toward Transmitter 22).

Coleman further discloses a PMT for storing PID assignment of video and audio programming associated with a predetermined time period and PID assignment of data PIDs associated with the video and audio programming associated with the predetermined time period (Col. 7, lines 35-58 and Col. 13, lines 25-37).

Coleman does not clearly discloses encoder and packetizer adapted to receive a plurality of video inputs, an audio input, and a plurality of data inputs, and

to encode and to packetize in order to generate the inputs Service 1..N PKTS of Fig. 1 (Notes each service # PKTS of Fig. 1 comprises packets of video elementary stream, audio elementary stream and ancillary elementary stream).

Obikane discloses encoder and packetizer (Fig. 12) to encode and packetize the plurality inputs (video, audio) into a plurality corresponding packet streams and generate a TS or S41 of one video/audio program (Col. 8, lines 5-Col. 10, lines 57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Coleman with Obikane so a plurality of associated video/audio data of each service is encoded respectively and then, different packet identification information is added to each coded video/audio data to packetize the coded video data as one program (Col. 7, lines 62-65+).

Coleman in view of Obikane does not clearly disclose "PID assignment of video, audio, and data PIDs associated with a timeslot having a viewership level greater than a predetermined threshold".

Lawler teaches the use of a viewer preference database that form a basis for determining future preferred programming data representing the predetermined characteristics (a viewership level greater than a predetermined threshold) of television programming schedule for delivery to the user (Col. 7, lines 54-Col. 10, lines 30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Coleman in view of Obikane with Lawler, so

to provides to viewer with a programming guide that is automatically personalized based on the viewing history of the viewer (Col. 2, lines 30-45).

Claim 10, the method claim is analyzed with respect to the apparatus claim 1.

2. Claims 2-8 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al. (US 5844620) in view of Obikane (US 6404818), and further in view of Lawler (US 5758259), and further in view of Herz et al. (US 5351075).

Regarding claim 2, Coleman, Obikane and Lawler does not clearly disclose "wherein the timeslot is associated with prime time viewing"; however, Coleman (Fig. 4 and 5) in view of Obikane and Lawler discloses wherein the timeslot is associated with time (Lawler; Col. 8, lines 46-50 and Col. 9, lines 12-20).

Herz discloses wherein the timeslot is associated with prime time viewing (Fig. 3-5; Col. 6, lines 28-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Coleman in view of Obikane and Lawler with Herz, so to schedule highly desired programs within a prime time period that is adaptable to user preferences (Col. 3, lines 65-Col. 4, lines 12).

Regarding claim 3, Coleman , Obikane and Lawler do not clearly disclose "wherein said prime time viewing is associated with one of local, regional, and national viewership".

Herz discloses wherein said prime time viewing is associated with one of local, regional, and national viewership (Col.3, lines 25-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Coleman in view of Obikane and Lawler with Herz, so to schedule highly desired programs within a prime time period that is adaptable to user preferences (Col. 3, lines 65-Col. 4, lines 12).

Claim 4, Coleman , Obikane and Lawler do not clearly disclose "wherein the predetermined time period comprises future viewership time schedule" however, Coleman discloses wherein the predetermined time period comprises future time schedule (see Fig. 4 and 5; Col. 17, lines 22-Col. 18, lines 8).

Herz discloses wherein the predetermined time period comprises future viewership time schedule (Fig. 5; Col. 7, lines 23-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Coleman in view of Obikane and Lawler with Herz, so to schedule highly desired programs within a prime time period that is adaptable to user preferences (Col. 3, lines 65-Col. 4, lines 12).

Claim 5, "wherein video and audio PIDs associated with the future viewership time schedules are mapped with data PIDs associated with the future viewership time schedules" is inherently further met by Coleman, Obikane, Lawler and Herz according to MPEG encoding for PMT of PID components of each program (as an example: a PMT' s PID 0025 of Components of Prog. 1 has Video's PID 0X0027, Audio PID 0x0034 and ancillary data PID 0x0039).

Claim 6, "wherein a plurality of video PIDs are respectively mapped to each data PID" is further met by Coleman as discussed in claim 5.

Claim 7, "wherein said mapping is based on periodicities a timeslot in day, a particular IPG page, and a particular day associated with the future viewership time schedules" is further met by Coleman, Obikane, Lawler and Herz as discussed in claim 5 in which the update of EPG the of a particular day associated with the future viewership time schedule is performed periodically (Coleman; Col. 17, lines 52-Col. 18, lines 8).

Claim 8, "wherein popularly viewed video PIDs are distributed evenly among data PIDs to provide load balancing" is further met by Coleman in view of Obikane, Lawler and Herz (Herz; Col. 5, lines 50-Col. 6, lines 27).

Claim 11, the method claim is analyzed with respect to the apparatus claim 2.

Claim 12, the method claim is analyzed with respect to the apparatus claim 3.

Claim 13, the method claim is analyzed with respect to the apparatus claim 4.

Claim 14, the method claim is analyzed with respect to the apparatus claim 5.

Claim 15, the method claim is analyzed with respect to the apparatus claim 6.

Claim 16, the method claim is analyzed with respect to the apparatus claim 7.

Claim 17, the method claim is analyzed with respect to the apparatus claim 8.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is 703-308-7372. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on 703-305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht
08/20/2004

HAI TRAN
PATENT EXAMINER